

HISTORIC PROPERTY INVENTORY FORM

IDENTIFICATION SECTION

Field Site No. 272-W OAHP No. _____ Date Recorded 4 February 1998
Site Name Historic West Area Shops Building
Common Machine Shop
Field Recorder Holly K. Chamberlain
Owner's Name U.S. Department of Energy, Richland Operations Office
Address P.O. Box 550
City/State/Zip Code Richland, WA 99352

Status

- ☒ Survey/Inventory
☐ National Register
☐ State Register
☐ Determined Eligible
☐ Determined Not Eligible
☐ Other (HABS, HAER, NHL)
☐ Local Designation

Photography

Photography Neg. No. HCRL Roll 382; Frames 2-7, 9
(Roll No. & Frame No.)
View of All exterior facades
Date 4 February 1998

Photo at right: Roll 382, Frame 2
View of north and west elevations

Classification ☐ District ☐ Site ☒ Building ☐ Structure ☐ Object
District Status ☒ NR ☐ SR ☐ LR ☐ INV
Contributing ☒ Non-Contributing ☐
District/Thematic Nomination Name Hanford Site Manhattan Project and Cold War Historic District

Description Section

Materials & Features/Structural Types

Building Type Industry
Plan Rectangular
Structural System Steel Frame
No. of Stories One

Roof Type

☐ Gable ☐ Hip
☒ Flat ☐ Pyramidal
☐ Monitor ☐ Other (specify) _____
☐ Gambrel
☐ Shed

Cladding (Exterior Wall Surfaces)

- ☐ Log
☐ Horizontal Wood Siding
Rustic/Drop ☐
Clapboard ☐
☐ Wood Shingle
☐ Board and Batten
☐ Vertical Board
☒ Asbestos/Asphalt
☐ Brick
☐ Stone
☐ Stucco
☐ Terra Cotta
☐ Concrete/Concrete Block
☐ Vinyl/Aluminum Siding
☐ Metal (specify) _____
☐ Other (specify) _____

Roof Material

☐ Wood Shingle
☐ Wood Shake
☐ Composition
☐ Slate
☒ Tar/Built-up
☐ Tile
☐ Metal (specify) _____
☐ Other (specify) _____
☐ Not visible

Foundation

☐ Log ☐ Concrete
☐ Post & Pier ☐ Block
☐ Stone ☒ Poured
☐ Brick ☐ Other (specify) _____
☐ Not visible

Integrity

(Include detailed description in
Description of Physical Appearance)

	Intact	Slight	Moderate	Extensive
Changes to plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Changes to windows	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Changes to original cladding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Changes to interior	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other (specify) _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

State of Washington, Department of Community Development
Office of Archaeology and Historic Preservation
111 21st Avenue Southwest, Post Office Box 48343
Olympia, Washington 98504-8343 (206)753-4011

LOCATION SECTION

Address 272-W Building, 200 West Area
City/Town/County/Zip Code Richland/Benton County/99352
Twp 12 N Range 26 E Section 6 I/4 Section SW 1/4 1/4 Sec _____
Tax No./Parcel No. _____ Acreage _____
Quadrangle or map name Gable Butte, Washington, 7.5 minute series
UTM References Zone 11 Easting _____ Northing _____
Plat/Block/Lot _____
Supplemental Map(s) _____



High Styles/Forms (Check one or more of the following)

- | | |
|---|---|
| <input type="checkbox"/> Greek Revival | <input type="checkbox"/> Spanish Colonial Revival/Mediterranean |
| <input type="checkbox"/> Gothic Revival | <input type="checkbox"/> Tudor Revival |
| <input type="checkbox"/> Italianate | <input type="checkbox"/> Craftsman/Arts & Crafts |
| <input type="checkbox"/> Second Empire | <input type="checkbox"/> Bungalow |
| <input type="checkbox"/> Romanesque Revival | <input type="checkbox"/> Prairie Style |
| <input type="checkbox"/> Stick Style | <input type="checkbox"/> Art Deco/Art Moderne |
| <input type="checkbox"/> Queen Anne | <input type="checkbox"/> Rustic Style |
| <input type="checkbox"/> Shingle Style | <input type="checkbox"/> International Style |
| <input type="checkbox"/> Colonial Revival | <input type="checkbox"/> Northwest Style |
| <input type="checkbox"/> Beaux Arts/Neoclassical | <input type="checkbox"/> Commercial Vernacular |
| <input type="checkbox"/> Chicago/Commercial Style | <input type="checkbox"/> Residential Vernacular (see below) |
| <input type="checkbox"/> American Foursquare | <input checked="" type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Mission Revival | <u>Industrial Vernacular</u> |

Vernacular House Types

- | | |
|---|--|
| <input type="checkbox"/> Gable Front | <input type="checkbox"/> Cross Gable |
| <input type="checkbox"/> Gable Front and Wing | <input type="checkbox"/> Pyramidal/Hipped |
| <input type="checkbox"/> Side Gable | <input type="checkbox"/> Other (specify) _____ |

NARRATIVE SECTION

Study Unit Themes (check one or more of the following)

☐ Agriculture
☐ Architecture/Landscape Architecture
☐ Arts
☐ Commerce
☐ Communications
☐ Community Planning/Development

☐ Conservation
☐ Education
☐ Entertainment/Recreation
☐ Ethnic Heritage (specify) _____
☐ Health/Medicine
☐ Manufacturing/Industry
☐ Military

☐ Politics/Government/Law
☐ Religion
☐ Science & Engineering
☐ Social Movements/Organizations
☐ Transportation
☒ Other (specify) Cold War Era
☒ **Study Unit Sub-Theme(s)** Chemical Separation, Facilities Support (Craft); Waste Management; Social History

Statement of Significance

Date of Construction 1944 Architect/Engineer/Builder E.I. du Pont de Nemours and Company

☒ In the opinion of the surveyor, this property appears to meet the criteria of the National Register of Historic Places.

☒ In the opinion of the surveyor, this property is located in a potential historic district (National and/or local).

The 272-W Building was one of two similar shop facilities built at Hanford Engineer Works in the 200 West and 200 East areas. The employees who initially worked there performed general and prototypical machine and tool and die shop tasks, and specifically those related to assembling and fitting the equipment in the 221-T Building, the world's first large-scale chemical separations plant. As built, 272-W contained a sandblasting room, machine shop (lathes, milling machines, drills, etc.), an electrical shop (with special drying oven), a pipe shop, a forge shop, a sheetmetal shop, a carpenter shop, a tool room and crib, restrooms, and offices. The high bay portion originally contained a steel-frame mock-up of the piping connections within some of the chemical separations cells in the 221-T Building. In the late 1940s, the high bay portion was altered to hold a mock-up of the Reduction-Oxidation Plant, finished in 1952, the first full-scale solvent extraction plant in the United States.

The 272-W Building is still serving as a general shops facility for the Hanford site. Because it was an important support structure to the first large-scale chemical separations plant in the world, and the first full-scale solvent extraction plant in the United States, it is the conclusion of the U.S. Department of Energy that the 272-W Building is eligible for inclusion in the National Register of Historic Places as a contributing property within the Hanford Site Manhattan Project and Cold War Era Historic District.

Description of Physical Appearance

Located in the eastern portion of the 200 West Area, the steel-framed 272-E is an essentially rectangular building which is oriented with its long profile running from north to south. It was served by a now unused rail spur which runs through its north end. The flat-roofed, one story building has two parts, a high bay shop section which is approximately 68 feet tall, and a lower service area with offices, restrooms, tool crib, and shop which is about 24 feet high, and which wraps around the high bay portion on the south and west. The roof of the high bay portion is basically flat, with a row of five ventilators placed along the very slightly peaked roofline. The lower portion has an asymmetrical gable roofline, with the shorter part to the east. There are three metal ventilators mounted in a row on the longer, west portion of the roof, and also six air conditioning units. 272-W rests on a concrete foundation and is sheathed in asbestos shingles, which were applied over the original wooden drop siding prior to 1964. There is a small shed-roofed addition at the southwest corner which measures approximately 4 feet by 4 feet.

(See continuation sheet)

Major Bibliographic References

AEC-GE Study Group. 1964. *Catalog of Hanford Buildings and Facilities 200 Area*. GEH-26434-200. Richland, Washington.

du Pont de Nemours and Company, E.I. 1943. Architectural Drawing W-69368 of 272-W. Wilmington, Delaware.

du Pont de Nemours and Company, E.I. 1945. *Construction, Hanford Engineer Works, U.S. Contract No. W-7412-ENG-1, du Pont Project 9536, History of the Project, Volume III*. HAN-10970. Wilmington, Delaware.

Gerber, M.S. 1993. *Manhattan Project Buildings and Facilities at the Hanford Site*. WHC-MR-0425. Westinghouse Hanford Company. Richland, Washington.

Sorenson, Don, NDA Team, Fluor-Daniel Hanford Company. 6 May 1998. Telephone Interview. Richland, Washington.